

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please replace the current listing of claims with the following replacement listing of claims.

1-20. (canceled)

21. (currently amended): A process for producing a glass melt, comprising the steps of:
melting glass in a first stage;
refining the glass melt in a second stage, the glass melt having a polyvalent ion content of at least 0.5 wt. %, ~~with the refining step conducted at a temperature of at least 1800° C;~~
~~and ;~~
homogenizing and conditioning the ~~melted~~ glass melt in a third stage; and
raising the temperature of the glass melt to at least 1700° C prior to said
homogenizing and conditioning step.

22. (previously presented): The process of Claim 21, wherein said melting step is conducted at a temperature higher than 1700° C.

23. (previously presented): The process of Claim 21, wherein said melting step is conducted at a temperature higher than 2400° C.

24. (previously presented): The process of Claim 21, wherein said refining step is conducted at a temperature of between 1800° C and 2400° C.

25. (previously presented): The process of Claim 21, wherein said polyvalent ions comprise one or more ions selected from the group consisting of vanadium, cerium, zinc, tin, titanium, iron, molybdenum, europium, manganese, and nickel.

26. (currently amended): The process of Claim 21, wherein said glass melt is free from toxic refining agents.

27. (currently amended): The process of Claim 21, wherein said refining step is conducted by heating the glass melt in a crucible using an induction coil.

28. (previously presented): The process of Claim 22, wherein said refining step is conducted at a temperature of between 1800° C and 2400° C.

29. (previously presented): The process of Claim 23, wherein said refining step is conducted at a temperature of between 1800° C and 2400° C.

30. (previously presented): The process of Claim 22, wherein said polyvalent ions comprise one or more ions selected from the group consisting of vanadium, cerium, zinc, tin, titanium, iron, molybdenum, europium, manganese, and nickel.

31. (previously presented): The process of Claim 23, wherein said polyvalent ions comprise one or more ions selected from the group consisting of vanadium, cerium, zinc, tin, titanium, iron, molybdenum, europium, manganese, and nickel.

32. (previously presented): The process of Claim 24, wherein said polyvalent ions comprise one or more ions selected from the group consisting of vanadium, cerium, zinc, tin, titanium, iron, molybdenum, europium, manganese, and nickel.

33. (previously presented): The process of Claim 26, wherein said polyvalent ions comprise one or more ions selected from the group consisting of vanadium, cerium, zinc, tin, titanium, iron, molybdenum, europium, manganese, and nickel.

34. (currently amended): The process of Claim 22, wherein said glass melt is free from toxic refining agents.

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35. (currently amended): The process of Claim 23, wherein said glass melt is free from toxic refining agents.

36. (currently amended): The process of Claim 24, wherein said glass melt is free from toxic refining agents.

37. (currently amended): The process of Claim 25, wherein said glass melt is free from toxic refining agents.

38. (currently amended): The process of Claim 22, wherein said refining step is conducted by heating the glass melt in a crucible using an induction coil.

39. (currently amended): The process of Claim 23, wherein said refining step is conducted by heating the glass melt in a crucible using an induction coil.

40. (currently amended): The process of Claim 24, wherein said refining step is conducted by heating the glass melt in a crucible using an induction coil.

41. (new): The process of Claim 21, wherein the glass melt is contained in a crucible made from one of platinum and a platinum alloy in said homogenizing and conditioning step.